

REMARKS

This Amendment is filed in response to the Office Action mailed on April 29, 2008. All objections and rejections are respectfully traversed.

Claims 1-23, 33-44, 46-49 are currently pending.

Request for Interview

The Applicant respectfully requests a telephonic interview with the Examiner after the Examiner has had an opportunity to consider this Amendment, but before the issuance of the next Office Action. The Applicant may be reached at 617-951-3067.

Claim Objections

At paragraph 4 of the Office Action, claims 1, 11, and 19 were objected to. Applicant has amended the claims and believes the claims are allowable over the objection.

Claim Rejections 35 USC § 112

At paragraphs 5-7 of the Office Action, claim 49 was rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement.

Support for the claim is found at page 1, line 18 to page 2, line 7; page 7, lines 26-30, page 8, lines 3-4, Figure 6, and page 15, lines 3-7. A person of skill in the art would understand reading the cited sections that a second file can replace a first file in a cache, where the second file is an updated version of the first file. Accordingly, Applicant believes claim 49 is allowable over the §112 rejection.

Claim Rejections 35 USC § 101

At paragraphs 8-11 of the Office Action, claims 10-18, 34-35, and 49 were rejected under 35 U.S.C. § 101, as being directed to non-statutory subject matter.

In representative claim 10, the server is hardware. Specifically, a server has attached disks (page 6, line 25-30). §101 merely requires that the elements are executed on hardware, and in this case the content comparator is executed on the local server. As claims 10, 11, 35, and 49 each state a server the claims are believed allowable over the §101 rejection.

Claim Rejections 35 USC § 103

At paragraph 15 of the Office Action, claims 1-4, 10-13, 19, 20, 34-38, and 47-49 were rejected under 35 U.S.C. §103 as being unpatentable in view of Brunk et al., US Patent Application Publication No. 2002/0126872, hereinafter Brunk, over Fostick, US Patent Application Publication 2004/0063449, hereinafter Fostick.

The present invention, as set forth in representative claim 1, comprises in part:

1. Method for comparing a first content with a second content to determine whether the contents are identical, comprising:
 - storing the first content in a cache on a local storage system;
 - requesting a second content from a remote storage system, wherein the second content is stored in a network storage arrangement on the remote storage system;
 - identifying a protocol encoding the first content and second content;
 - computing a first signature of the first content and a second signature of the second content, wherein the first signature has one or more unique protocol markers that are generated from transformation during protocol encoding and the second signature has one or more unique proto-

col markers that are generated from transformation during protocol encoding;

comparing the one or more unique protocol markers of the first computed signature with the one or more unique protocol markers the second signature to determine whether the first content is identical to the second content; and

storing the second content in the cache on the local storage system, in response to determining the first content is not identical to the second content.

By way of background, Brunk discloses a database system that uses content signatures to facilitate database lookup. The content signatures are strictly content related, which means that they derive by methods directly referring to the content of the data signals which have to be identified and compared respectively. “A *content signature* is preferably derived as a function of the content item itself. In this case, a signature of a content item is computed based on a specified signature algorithm. ... One possible signature algorithm is a hash (e.g., an algorithm that converts a signal into a lower number of bits). The hash algorithm may be applied to a selected portion of a signal (e.g., the first 10 seconds, a video frame or a image block, etc.) to create a signal.” (Paragraph 21). The content signature is further derived by dividing each signal in segments and transform into a frequency domain (e.g. a Fourier transform domain) or time-frequency domain. (Paragraph 22).

Fostick discloses a system for sending messages between mobile communication devices via relays. Synchronized local caches are maintained at the relays for storing and retrieving multi-media content originating from end-users. A first mobile device transmits a digest of a multimedia content. The digest is a small file that serves to identify the multimedia content, such as a low-resolution JPEG image. The first relay uses the digest to determine whether the multimedia content is stored on the local cache

of the relay. If it is stored on the first relay, then the first relay notifies a second relay to also send part of the content to the second mobile device.

Applicant respectfully urges that Brunk and Fostick taken alone or in combination do not teach or disclose Applicant's claimed novel *comparing the one or more unique protocol markers of the first computed signature with the one or more unique protocol markers the second signature to determine whether the first content is identical to the second content, storing the second content in the cache on the local storage system, in response to determining the first content is not identical to the second content*. In further detail, in Applicant's claimed invention the cache is located on a local storage system, for example a user's computer. The second content is located on a remote storage system, where the remote storage system arranges the data in a network area storage arrangement. The local storage system can determine if the first content is different then an original copy (second content) stored on the remote storage system by the local storage system requesting transmission of the signature of the second content. If the signatures are the same, then it is not necessary to transmit the second copy. If the signatures are different, then the second content is stored in the cache.

Applicant argues that there is no motivation to combine Brunk and Fostick. According to *In re Kahn*, "mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole. 441 F. 3d 977, 988 (CA Fed. 2006). Furthermore, it is "necessary to consider the reality of the circumstances, in other words,...would a person of ordinary skill in the art reasonably expect to look for a solution to the problem facing the inventor." *Id.* Fostick merely teaches comparing small files (digests) stored in caches on relays in the mobile communication field. Fostick deals with mobile communication using relays. Therefore, Applicant, whose skill

is file system back-up, would not be motivated to look to Fostick, mobile communication using relays for a solution to the Applicant's problem. Therefore, it is the Applicant's position that there is no motivation to combine Fostick and Brunk because Fostick is just "mere identification in the prior art of...an element" (i.e., cache).

Accordingly, Applicant respectfully urges that Brunk and Fostick, taken alone or in combination, are legally insufficient to make obvious the presently claimed invention under 35 U.S.C. § 103 because of the absence of the Applicant's claimed novel *comparing the one or more unique protocol markers of the first computed signature with the one or more unique protocol markers the second signature to determine whether the first content is identical to the second content, storing the second content in the cache on the local storage system, in response to determining the first content is not identical to the second content.* .

At paragraph 16 of the Office Action, claims 4-9, 14-18, 21-23, and 39-43 were rejected under 35 U.S.C. §103 as being unpatentable over Brunk, in view of Fostick, and in further view of Dimitrova et al., US Patent No. 5,870,754, hereinafter Dimitrova.

Applicant respectfully notes that claims 44-9, 14-18, 21-23, and 39-43 are dependent claims that depend from independent claims believed to be in condition for allowance. Accordingly, claims 4-9, 14-18, 21-23, and 39-43 are believed to be in condition for allowance.

All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims.

Applicant respectfully solicits favorable action.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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